



Mathematics in the Formation of Primary School Teachers in the Complementary School of Passo Fundo - RS¹

A Matemática na Formação da Professora Primária na Escola Complementar de Passo Fundo – RS

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Abstract

The present work deals with the Complementary School of Passo Fundo/RS, having as time frame the period between 1929 until the 1960s. It reports its trajectory and perceptions about the constitution of the identity of the primary teacher that this School sought to train. Therefore, the work was based on research in the Institution's archives, as well as newspapers of the time, to meet this intention. Taking the Examinations Records from the years 1947 to 1949 as a reference, traces of the studied contents were found. In Mathematics, there was a predominance of arithmetic, with a focus on the perspective to teach rather than to be taught. However, it was also possible to see how the centralizing axis of classes was shifted, from the teacher to the students, largely due to the evidence of the presence of the Escola Nova's ideas, identified throughout the analyzed period. These conclusions are associated with the encouragement of other possible questions to be studied in future works.

Keywords: Training; Mathematics; Normal Education; Complementary School.

Resumo

O presente trabalho trata sobre a Escola Complementar de Passo Fundo/RS, tendo como marco temporal o período entre 1929 até a década de 1960. Relata sua trajetória e, através de indicativos do material inventariado, busca tecer algumas percepções sobre a matemática na formação da professora primária que esta Escola buscava formar. Para tanto, o trabalho pautou-se em pesquisa nos arquivos da Instituição, bem como jornais da época para ir ao encontro dessa intencionalidade. Tendo as Atas de Exames dos anos de 1947 a 1949, como referência, vestígios dos conteúdos estudados foram encontrados. Em Matemática, evidenciou-se, um predomínio da aritmética, com foco na perspectiva de ensinar em detrimento de ser ensinado. Não obstante, também foi possível

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¹ This work was developed within the History and Culture of Mathematics research group at the University of Passo Fundo/RS and focused on the elementary school teacher, due to the specificity of this school to, for a long time, teach the first grades of school education.

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perceber como se deslocou o eixo centralizador das aulas, da professora para os alunos, muito devido aos indícios da presença do ideário da Escola Nova, identificados ao longo do período analisado. Associa-se a essas conclusões o estímulo a outras questões possíveis de estudo em trabalhos futuros.

Palavras-chave: Formação; Matemática; Ensino Normal; Escola Complementar.

Introduction

We want to do a writing exercise having the first primary teacher training school – Complementary School of Passo Fundo/RS - as the focus of the study. The temporal space goes from its creation, in 1929, until the 1960s. The choice of the theme occurred, in the first moment, because Passo Fundo, located in the north of the state of Rio Grande do Sul, is considered, until today, as a reference in the region in different areas, among them education. Also, to contribute to the writing of the history and preservation of the memory of this educational institution and, in addition to that, the material inventoried allowed us to intuit considerations about its constitution as a space of formation of primary teachers, being the Mathematics discipline one of the references.

In association with these ideas, Lourenço Filho (2001) highlights that the need to teach goes back to the most distant times of mankind, but the concern with teaching children in a more systematic and directed way only occurs "in the last three centuries" (p. 31). One of these initiatives occurs with La Salle, in 1685, which had a proposal for a more structured teaching, called normal education, because

the good abbot verified, however, something so simple and so fruitful: that the teaching should be collective, given to groups of children, and that, for greater interest, it should be explained in a tone of natural conversation. This was the collective teaching that La Salle called normal teaching. In its conception, the idea of classifying students according to their progress and the consequence of adapting each step of the lesson to the capacity of the learner was germatically present. Thus, it was no longer enough that the teacher knew how to read the lesson, that he was the teacher, but that he had mastered and understood the text that he was going to explain, and that he had to match the mentality of his disciples (Lourenço Filho, 2001, p. 31).

Soon, the concern to prepare "the teacher" to work under this new perspective arose and the Normal Schools were created. They appeared in Europe, and later in America, with the concern of preparing the "schoolmaster". In Brazil, a Normal School was created in 1835⁵. In Rio Grande do Sul, the first school concerned with training primary teachers appeared in Porto Alegre, in 1869, but not yet in the molds of what would later become the complementary schools⁶.

⁵ The first Normal School in Brazil was founded in the province of Niterói, in the state of Rio de Janeiro, being installed in 1835, with the creation law no. 10 of April 4, 1835, by Joaquim José Rodrigues Torres, then president of the Rio de Janeiro province.

⁶ Rheinheimer (2018) states that such complementary schools meant a space directed and aimed at teacher training, being a space for a practice consistent with this intended training.

It was only in 1906, by force of law, according to Werle (2005) that the Complementary Schools were created in the state of Rio Grande do Sul, with the intention of replacing the District Schools⁷ and with the purpose of "preparing candidates to the primary public teaching" (p. 602), as long as there were students with abilities in the elementary course subjects. This prerogative was an indication for an expansion of the offer in the training of primary teachers, especially for the interior of the state.

Although in terms of legislation, since 1906, it was possible the existence of Complementary Schools, only in 1929 the first ones were effectively installed, in the cities of Pelotas, Cachoeira do Sul, Passo Fundo, Alegrete, Santa Maria and Caxias do Sul. (Bergoza & Luchese, 2010, p. 123).

The Passo Fundo Complementary School, created by Decree No. 4.273 of March 15, 1929, had the beginning of classes and official installation on April 3, 1929, in the building of the Pinheiro Machado Club, located at Avenida Brasil 792, today Passofundense Academy of Letters. Its creation is highlighted in the city, as reported in the newspaper of March 16, 1929, stating

Yesterday, at 4 pm, the Complementary School was inaugurated in this city. To this act were invited the municipal, state and federal public authorities and the local press. An old aspiration of Passo Fundo is thus fulfilled, and it is expected that this teaching institute fully performs its objective, being at the head, directors and teachers of renown in the annals of public education in our state (O Nacional, 16/03/1929, p. 1).

Its first director was Professor Reinaldo Heuer, until 1932, when the first class graduated. According to Kneipp⁸ (1989), the teachers who composed the school in this initial period were

(...) hard-working, committed teachers, giving of themselves, within the possible, the impossible, to a school recently installed in inadequate conditions, without libraries, at a time when they did not enjoy the benefits of today's radio, at a time when television did not exist and even the means of transportation were the most precarious - it is enough to point out that to reach the State Capital, Porto Alegre, it took two days of train travel (s.p.).

His speech provokes us to think that the School was constituted more by the determination and will of the community in having an institution that trained primary teachers in the city than effective conditions of operation; even so, according to Camargo

⁷ Tambara (2016) explains that the district colleges were created by Decree n. 89, of February 2, 1897, and would be schools where the implementation of serial teaching in elementary school in Rio Grande do Sul effectively took place.

⁸ Cecília Borges Kneipp was a student in the school's first class and, later, a teacher. In 1989, during the celebrations of the sixtieth anniversary of its creation, she was invited to make a speech about the school. The copy of this speech was kindly given by the teacher some years ago to one of the authors of this text.

(2005), many sought the "schooling and understood the new social, cultural possibilities that represented the Normal Course" (p. 85).

The Complementary School changed location and name a few times. Today it is installed in its own building and under the name of State High School Nicolau de Araújo Vergueiro (EENAV), still maintaining among its courses the Qualification for Teaching in the Initial Series. In 2019, it celebrated its ninetieth anniversary.

Such considerations guided us to reflect on the Passo Fundo Complementary School. Thus, in the following pages, we will try to explain, through the "School memories" - via documented sources - a little of its trajectory, and how we intuited the circulation of cultural, social, and educational ideas that punctuated the formation of the identity of the elementary school teacher. Among these items is the subject of Mathematics. The bias chosen as reference is supported by three documents:

(a) Book of Minutes of the School Graduations;

b) Folder with the list of subjects that made up the curricular grid of the teacher training course; and

c) School Final Examination Minutes.

In addition, we interacted with newspapers, documents and books from and about the period considered, as well as with literature on pertinent themes, in order to build our proposal of interlocution.

Some perceptions and ideas about the Passo Fundo Complementary School

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The first group of students entered the school in 1929 and, according to Camargo (2005), fifty-nine were enrolled. The Normal Course lasted three years and, in the graduation of this first class, nineteen graduated. In the following years, in general, there was regular admission to the School.

In the School's Graduation Act Book, in which the graduates from 1932 to 1960 are registered, we find 11 graduates and 395 students.

These numbers show what authors such as Cimpa (1987), Tambara (1998), Gouvêa (2002) and Faria Filho (2007), among others, point out as the feminization of the teaching profession, especially the primary one. This association occurs, according to the authors, due to the association of the elementary school teacher as a "second mother" of her students and, as such, having the classroom as an extension of her home and, consequently, of her functions as a woman and housewife.

The woman, being considered more "docile", "friendly", "tender" and by nature linked to motherhood, would be much more suitable to occupy this space, outside the home and the church. However, without losing her attributes of being a guardian of good manners, of healthy habits, apt, by a simplistic logic, responsible for the children's education. Faria Filho (2007) also understands that this situation is of such complexity that the training proposed to the normalists gained notoriety as "scientific" for practices already given as domestic. An example would be the presence in the curricula of the subject Domestic Education.

In the Passo Fundo Complementary School, the first class has in its curriculum the subjects of Home Economics (1st year) and Manual Work (1st and 2nd years).

The subject of Home Economics would be part of the course disciplines until 1943, as recorded in the school's documentation. This presence corroborates Louro, when he states that

Domestic economy [...] would also become an integral part of these courses, constituting a series of teachings related to home management. Thus, much learning that had been restricted to the home would be transferred to the school environment. This process, "schooling of the domestic", would not constitute, however, a mere transposition of knowledge from the domestic world to the school; it would imply a reworking of such knowledge and skills. In fact, what will occur will be an increase of complexity and parcellation of knowledge, supported by scientific concepts, unfolding in sequential steps, giving them, finally, a school and didactic dressing (2007, p. 458).

Such perspective is evidenced when Kneipp (Camargo, 2005) says that in this discipline it was practical "to sew, make bras, underwear, underwear, natural flowers, painting" (p. 86).

Faced with these statements, we wonder what teachings or perspectives this subject contributed to the primary teacher in her major function of teaching children? So far, we have not found a plausible answer.

We intuit that this subject, as well as the Manual Work subject, leads us to understand that the school was a space that performed a double function in relation to its students. On the one hand, it was seen as a teacher and, consequently, it gave the woman space so that, after graduating, she could work in a profession outside the home. On the other hand, it promoted, mainly through the disciplines previously highlighted, a close connection with the home and its tasks, since the contents of these were learned in a scientific and academic environment (school), for a smaller number of students, giving through these same disciplines, the link of the school as being a harmonious house, idealized, working perfectly, away from the real daily life of the homes of students. (Louro, 2007)

We also understand that such disciplines outlined a dubious role in school. One would be the perception that in this space the student would be a teacher, that is, she would have her profession; another would be to keep conscious, even with this prerogative, that they should not forget their innate "vocation" for domestic life as a wife, mother and responsible for the household chores.

In this thought, when we observe the disciplines that came to compose - in different moments - the formation of elementary school teachers from the Complementary School, we understand that they integrate the school culture category, or, as proposed by Faria Filho,

the way in which in a concrete and particular historical situation the spatial-temporal dimensions of the school educational phenomenon, the knowledge, sensibilities, and values to be transmitted and the school materiality and methods are articulated and represented by the school subjects (2007, p. 195).

Taking this consideration as a reference, we understand that the very processes of constitution of the School say about how the normalist students should be formed, as well as which knowledge would be important to them in their "construction" of primary teachers. In this universe, the school subjects are a great indicator of this constitution, because in 1990, Chervel calls attention to this fact when he states "that a school subject includes not only the teaching practices of the class, but also the major purposes that presided over its constitution and the phenomenon of mass acculturation that it determines. (p. 184).

Of the disciplines that made up the School's first class, we find two that we would call pedagogical, which are Pedagogy and Practice. Both were in the last two grades of the course. The first continued to be part of the curriculum until the class that started its studies at the school in 1942. The discipline of Practice, on the other hand, is no longer part of the school curriculum as of 1932.

We have not found any evidence of what exactly was worked in terms of content in the respective subjects. In Tambara, we found the reference that Pedagogy would have as content "its history, physical, intellectual and moral education, methodology, teaching practice" (2016, p. 22). As for Practice, we found nothing to indicate what exactly it was about and what contents it comprised. We suppose, at first, due to its name, that it was a discipline that today we would call Internship. As there were news in the newspapers of the time associating the actions of the students of the Complementary School with the Elementary School, it is possible to assume that this discipline sought to bring together classroom studies and practice through actions with students in the first grades. However, as it ceased to be part of the school's curriculum in 1932, perhaps this was not the intention, or even, if it was, perhaps this task would be incorporated by another discipline.

Including this perspective of the students having some contact with elementary school classes in a more directed way, nothing explicit about this was found in the documents

inventoried until 1953 (the last one we were able to map in the School's curricular grid subjects), only indications of this practice present in a statement in the newspaper *O Nacional*, from April 7, 1932, which, although it deals with the methods used by the city schools for literacy, emphasizes that "[...] since it has already allowed us, for the practice of the students of the Complementary, its teaching, in one of the classes of the establishment that it directs". The establishment in question is the Elementary School of Passo Fundo⁹, directed at the time by teacher Eulina Braga.

We understand that such reference is very close to Tambara (2016, p. 22-23), having the Decree of 1912, Art. 204, as a reference, when stating: "In the teaching of pedagogy, in addition to the 3 hours dedicated to lessons in the 3rd grade, there will be a practical lesson of one hour, made by the teacher in the elementary school. To this lesson they will go in groups, which cannot exceed 12 on each lesson day. [...]", being that, if not exactly the students were developing an activity at the Elementary School equivalent to an Internship, it evidences the proximity between the schools in question, as well as, as previously stated, from the news in the city's newspaper, associated with the name of the two Educational Institutions. These are considerations that evidence a possible relationship between the Elementary School and the Complementary School regarding the activities previously described.

Thus, in this line of thought, the subjects come back to the center of our attention and, when we analyze the composition of these in the classes between the years 1929 and 1953, we notice curricular changes practically every year. We bring here only their numbers, by year, to illustrate this perception.

Table 1 - Number of subjects per year in the Complementary School

Class/enrollment	Total
1929	17 ¹⁰
1930	19
1931	17
1932	15
1933	13
1934	13

⁹ It was founded in 1911 and is the oldest school in the city. Today, it is the Protásio Alves State High School. The teacher Eulina Braga, who besides being a teacher at the school, was also the principal of the school and was an important person to intervene, with the municipality, to bring the Complementary School to Passo Fundo, since the intention was to move it to Cruz Alta (Kneipp, 1989).

¹⁰ There are subjects that took place in all three years of the school, such as Portuguese, and others that only occurred in the first, second, third or two years. For this total we consider the name of the discipline.

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1935	14
1937	13
1938	12
1939	12
1941	12
1942	13
1947	15
1948	15
1949	25
1950	18
1951	17
1952	no references
1953	20

Source: Folder: List of subjects that made up Complementary School.

The changes in quantities may be an indication that the School, through the offer of these, each year, did not have clear the professional profile of the future teacher, as well as, through the increase and supply of them, sought to approach educational ideas and legislation that would be circulating and that, somehow, upon arriving at the School, required new changes.

When taking as reference the years 1949, 1950 and 1953, with the largest number, many are instated probably by influence of the ideas of the New School, "modernizing" or also Reformulated School.

The New School, according to Pereira (2010), was a movement that took great impetus in the late nineteenth century and the first decades of the twentieth century, and intended to incorporate another vision and attitude to the school, and its main axis was to focus attention on the child, because as Lourenço Filho states: "The educational renewal of our time would thus have to begin with the discovery of the child" (1978, p. 37).

Peres (s.d., cited in Búrigo, Fischer, and Peixoto, 2014) states that the ideas of the New School were already circulating in the state, but it was from the 1930s that they would be expressed in actions "within the scope of public policies" (p. 153). This gained greater notoriety with the creation, in 1935, of the State Secretary of Education and Health Affairs

and also, in 1939, with the publication of the regulations and the new elementary school programs.

These alterations probably had an impact on the Complementary School, because the primary teachers needed to be integrated to these new times and, as such, their formation, via the courses to be taken, should - officially - provide these professionals with these conditions.

By comparing the courses from 1949, 1950 and 1951, we can clearly see this:

Table 3: Complementary School subjects for the years 1949, 1950 and 1951.

Subjects per year					
1949 - 1st year		1950 - 2nd year		1951 - 3rd year	
Portuguese	Mathematics	Portuguese	Literature	Portuguese	Literature
Physical Education	Design	Didactics	Mathematics	Mathematics	Introduction to Education
Biology	Music	Hygiene	Physical Education	History and Philosophy of Education	Fundamentals of General Psychology
Psychology	Anatomy	Statistics	Design	Educational Psychology	General Sociology
Physics and Chemistry	Initiation	Portuguese and Literature	Physics and Chemistry	Applied Statistics in Education	General Biology
Didactics	Hygiene	Sociology	Music	Educational Sociology	Didactics and Practice of Primary Education
Sociology	Literature	Biology	Anatomy	Design and Applied Arts	Music and Singing
History and Philosophy	Childcare	Initiation	Psychology	Educational Biology	Physics and Chemistry
		History and Philosophy	Childcare	Hygiene and Childcare	Human Anatomy and Physiology

		Physical Education, Recreation and Games	Hygiene and Health Education
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Source: List of subjects that made up Complementary School

Saviani (2008) understands that the great bases of the New School are in psychology, sociology and philosophy, as well as from them come a look directed to the school and the new conceptions that the escolanovism proposed. In 1949, Sociology and Psychology were offered, as well as Philosophy and History. It is obvious that the mere fact that these subjects are offered is not indicative of themes aligned with the ideas of the Renewed School. When we look at the 1953 subjects, they are there, more specifically: General Sociology and Educational Sociology; Foundations of General Psychology and Educational Psychology; History and Philosophy of Education.

These are indicative, at least in the name of the subjects, that there was - on the part of the Complementary School - a search for alignment with the thought of the New School, in the same way that others are added as "applied" or "to education" or "educational". This understanding is allied to Chervel (1990), when he understands that some disciplines are constituted as a contribution of more general knowledge and others would give fundamentals of a nature more directed to prepare the student for the practice of his studies.

Thus, taking Guarnica and Souza, when dealing with the New School, who understand it as a new pedagogical order - having as references John Dewey, William Kilpatrick, Édouard Claparède and Ovide Decroly - and in it is "the centrality in the student in the educational process and respect for their characteristics and bio psychological needs" (2012, p. 344). We understand that disciplines such as Hygiene and Childcare, Physical Education, Recreation and Games, Didactics and Practice of Primary Education, Educational Biology, among others, come to corroborate in a more directed way to this purpose of the scholasticnovism.

We understand that the School was reworked, in terms of subjects offered, in the period considered in this text, with some more directed to the constitution of the primary teacher as a professional responsible for teaching children and others, broader, that we would consider general and content oriented. Among the latter is Mathematics.

Mathematics at the Passo Fundo Complementary School

Mathematics has always been present in the constitution of the subjects of the Complementary School, not necessarily with that name, but being present through what Valente (2015, p.18) calls "elementary mathematical knowledge". In the class that enters in 1929, Arithmetic is present in the three years, Geometry and Algebra in the second and third

years. This constitution is maintained for the classes that started in 1930 and 1931. It is interesting to note that this arrangement is identical to that proposed by Decree 4.277 of 1929 for the programs of the Complementary Course. We assume, then, that the Passo Fundo Complementary School adopted this disposition.

The subject of Mathematics remains in the curriculum of the school until 1953 (the last year that we were able to map), and undergoes changes in the arrangement of the grades in which it is offered: until 1942, it is present in all three grades; in 1947, it is a subject of the first and second years; in 1949, it is only in the first year, lasting this situation until 1953, when it is present in the first and third years.

From this perspective, we have located a book of minutes of the School's Final Examinations, between the years 1947 and 1949, and in them the transcription of many questions from these examinations, which allowed us to manage some conclusions.

The School's final exams in this period had its own organization and structure for such an evaluation, as described in Minute No. 43, of December 11, 1947, when it reported:

On December 11, 1947, in the Physical Education Pavilion of this establishment, Mr. Federal Inspector, Mrs. Principal and members of the examining board, the 1st grade student J. L. T., who, due to illness did not attend the second call for drawing according to Decree Law 8.347 of December 10, 1945, art. 49, Parag. 4, took the examination in the subject.

We observed that the exams were held in the presence of the examining board, even if they were not a second call, since they all have the same writing pattern in the minutes. In front of the student or students, a number of questions was drawn, usually three to five, to be solved. The occurrence of oral exams is also evident, as Minutes No. 101, from December 11, 1948, reports. It reads:

On December 1, 2, 3, 4, 6, 7, 9 and 10, 1948, in this city of Passo Fundo, State of Rio Grande do Sul, in the presence of the Federal Inspector, the Principal and members of the Examining Boards, the oral and practical exams of the respective subjects: Portuguese, Mathematics, History, Music and Drawing of the A and B classes of the 1st grade were held.

There are no records of oral questions. The practical questions, according to the other minutes found, lead us to conclude that they were about the resolution of questions proposed by the examining board.

In the exam minutes the name of the class, A and B, is identified, for example, the grade and the subject of the referred exam. When we compare the names of the students who took the final exams we find the names of students who were later listed as graduating from the school's Normal Course, thus showing that these were questions applied to the normal students and, probably, in accordance with the content studied during the year. Among these

exam questions, we found some in Mathematics. The localized ones were very similar to those found in textbooks of the time, showing a very academic study of mathematics.

This consideration leads us to intuit, in the case of Mathematics, that for the Normal Course there was no differentiated Mathematics in terms of the contents covered. We also believe that, when it came to the mathematical knowledge proposed to the normalist, nothing, or very little, was aimed at distinguishing between what Bertini, Morais, and Valente (2017)¹¹ define as knowledge to teach and knowledge to teach. This is because, according to the authors:

The first of these - the knowledge to teach - refers to the knowledge produced by university disciplines, by the different scientific fields considered important for teacher training.

In our case, we can replace the word knowledges with Mathematics and thus we will have Mathematics to teach and Mathematics to teach, preserving the definition given above. In the examination minutes located, we did not find any in the questions that dealt with elements that we could link to Mathematics to teach. Also in this consideration, it is interesting to note that the minutes of practical examinations are predominantly from the disciplines of Mathematics, Drawing and Portuguese. There are no examinations, for example, of Anatomy. Perhaps this shows that the students of the Normal Course had more difficulties with those subjects, due to their more objective nature and, in the case of Mathematics, as the questions show, also because it required solution procedures involving more structured and standard calculations and reasoning processes, which we understand to be close to a Mathematics to be taught.

The Mathematics questions were composed of arithmetic and geometry topics. Algebra was not included in the exams located, showing that the normal students probably did not study this content at the time.

This fact made us realize a familiarity with Decree No. 8,020 of 1939, which establishes the minimum programs to be adopted in elementary school. The familiarity we refer to consists in the proximity of the contents proposed to elementary school, in mathematics, by the decree, and the questions present in the examinations of the school's normalist students, indicating that probably what the future teachers studied was the same or very close to what should be taught, with arithmetic and geometry as the main focus.

Let's take for example that the Decree in reference determines for the third primary year the "notion of fraction, as part of the whole" (p. 95) and the Minutes of Examinations n.31, of December 03, 1947: *"Two girls do a job; the first does 1/7, then 3/8 and finally 1/9. What part of the work does the second girl do?"*

¹¹ More data on this issue can be found in Hofstetter & Valente (2017).

Also, the same Decree proposes that in the second primary year work should be done on "division with simple divisor and dividing up to 100" (p. 85). In Minute No. 173, of November 28, 1949, is: "*How much would you pay for 10 dz if 3 dz cost Cr\$ 10.80?*" Thus, as well as the questions exemplified above, there follow others that by their nature connect with items in the Math program proposed by the 1939 Decree.

With such understanding we bring some questions that composed the exams of the 1st grade and allow us to intuit what was studied by the students, because "[...] exams and school tests are valuable documents for study [...] of the constitution of the professionalization of teachers." (Morais, 2018, p. 78). We will also include questions from Drawing exams, because in them we find some questions linked to geometry. In the years 1947 and 1948, this subject composed the curriculum of the Normal Course in three years; in the class that entered in 1949, it is present only in the first year; later, in 1950 it is again in three years, and in 1953 it will be called Drawing and Applied Arts.

In the exams from 1947 to 1949, the questions that are present show a combination between artistic and geometrical propositions. We can observe this in Examination Minute n. 11, from June 25, 1947, in which its questions are:

- a) *Interlaced.*
- b) *Draw a line that is parallel to a line AB.*
- c) *Frieze composed of flowers.*

Or again in Examination Minute No. 13, of June 27, 1947, by requesting:

- a) *band composed of roses.*
- b) *Decorative background composed of numbers.*
- c) *Trace a hexagon by the general rule - radius 3 cm.*

In our understanding, the discipline of Drawing, with its exams as a reference, worked, together with the students, activities of an artistic nature, which today would be the main object of the discipline of Artistic Education or Arts in schools and would also teach traces and propositions proper to what today would also constitute the discipline of Geometric Design.

We also understand that perhaps the function of the discipline of Drawing was to establish, based on geometric drawing, the possibility of linking it with ramifications of an artistic nature, as we find in Minute No. 62, of June 22, 1948, in questions a and c, when requesting:

Decorative background, composed of triangles and based on the orthogonal mesh and also, trace the rosette based on the pentagon.

Thus, it seems to us that the discipline of Drawing would deal more with the question of the construction of elements of a geometric nature; geometry concepts are proposed in the Mathematics exam questions, such as the following:

How are triangles classified according to their sides? (Minute 9, of 24/06/1947)

The perimeter of a rectangle is 50 cm. The base is $\frac{2}{3}$ of the height. Determine the dimensions. (Minute No. 22, of 24/11/1947)

What is a straight line? What is the supplement of a 95° angle? (Minute 29 of 03/12/1947)

Give the result in m^3 : $28 \text{ dam}^3 - 98.4 \text{ cm}^3$. (Minute 61 of 06/21/1948)

As far as Arithmetic is concerned, the questions deal with the four basic operations, unit transformation, operations with fractions and also numerical expressions, as illustrated by the questions:

Solve: $0.444... + 0,777... : 0,5333...$ (Minute No. 22, of 11/14/1947)

Resolve: 26 days 17 hours 30 min : by 3. (Minute n. 31, of 04/12/1947)

From the result of: $(55 + 35 + 15) : 5 - (45 - 20) : 5$ (Minute No. 60, of 06/21/1948)

Write in Roman numerals: 237. (Minute No. 126 of June 24, 1949)

When we look at these and other questions from the mathematics exams present in the aforementioned minutes, we understand that they are predominantly questions of resolutions by means of calculations, but that implicitly it is necessary to know the conceptual element behind the question in order to set its resolution in motion, since, for example, one would not know how to answer the value in degrees of a supplement of an angle if the concept of supplement is not understood. Your resolution needs this.

This would indicate that the exam questions would imply the teaching process to the normal students, because by asking, for example, what is a straight line, it is assumed that the concept was taught in class, i.e., there were moments of exposure of geometric concepts and, thus, we also understand those of an arithmetic nature. By association, we understand that after the concept was assimilated, it would need to be used to solve the proposed questions; the calculation itself would take place, because if the student had the definition of periodic digits as an example, she would need to develop questions in which she was asked to operate with these elements.

From this, we understand that the classes probably followed a content conceptualization procedure, and perhaps with examples; subsequent exercise resolution with the intention of understanding the algorithms of the items studied. We also understood that the questions and the reflections made on them in the exams gave us a panorama of the mathematics teaching gears that occurred in the classroom.

Thus, we did not evidence, at any time during the period considered in this paper, elements about the Mathematics to teach in the Normal School Course. We believe that the normalist, when a classroom teacher, would have a strong tendency to reproduce in her class, in elementary school, the teaching dynamics that she experienced as a student, putting into circulation an action of reproduction of experienced practices. Assuming our reasoning to be coherent, we would have here an additional research precedent, in face of other ideas aroused by the writing of this work and, certainly, being able to unfold in other possible studies.

By way of consideration

As we close this writing exercise about the Passo Fundo Complementary School, we do not want to associate the final word to considerations, because we understand that it is not finished, but partially concluded. This understanding is due to the fact that we have dealt with a fecund theme of approaches and also because we understand the focus chosen in this text. If chosen by other authors, they could excel in another look, highlight other perspectives, or even understand, facing the same sources, other analysis biases.

We propose to narrate the trajectory of the Passo Fundo Complementary School in the period between 1929 and the 1960's. Our intention is to describe how we intuited the circulation of different cultural, social and educational ideas that punctuated the formation of the identity of the elementary school teacher.

We understand, even dealing with an institution that exists until today in Passo Fundo, that it is not constituted as a space for the formation of elementary school teachers by itself. It was necessary the action of teachers and students, in a communion of elements coming from the cultural, social and educational environment that led to different understandings of such magnitude to influence the constitution of the identity of the elementary school teacher that the school trained for many years.

At first, considering the subjects that made up the curriculum of the Complementary School, we have the connection almost as a natural consequence of the elementary school teacher as a mother and having her students as children and, therefore, the same dedication given to the natural ones is expected for those of the school, in which it would be up to her to train people of good character and lead them to be citizens aware of their social functions.

Later on, with the arrival of the New School ideas to the Complementary School, although we didn't find more explicit evidence of this perspective due to lack of sources, we understand by the dynamics of adding and removing subjects, and also through their names, throughout the teacher's training course, this tendency and this alignment to the "escolanovista" ideals, especially from 1953 on, being possible to intuit that, due to this, the center of the educational process passed from the teacher to the student.

At this time, in which different conceptions of what a primary teacher should be and what contents should constitute her education, is the subject of Mathematics. It has been

present since the beginning of the School's creation, with more or less presence in the curricula, but always constituting the formation of this teacher for the exercise of teaching in elementary school. This constitution, in view of the sources found and the basis of this work, which did not indicate a greater concern with Mathematics to teach, but was guided, mainly by the questions of the final exams, by a predominance of Mathematics to teach.

We are aware that the conclusions of this work may, if more material on the Complementary School is found, change considerations presented here, or even confirm more strongly what we have sensed in the material available so far. This perspective encourages us to continue our research work through the bias of the history of this institution, because, besides the prerogatives addressed in this material, other elements to be researched may emerge.

One of the elements to be fruitful for other treatments would be the presence of the discipline of Drawing throughout the entire period of the School brought in this work. What elements constituted the discipline? Why was it considered important to compose the curriculum of the elementary school teacher? How was the influence of the New School perceived in the discipline? What were the classes like? What materials were used? Has the discipline of Drawing always dealt with geometrical and artistic elements, leaving the conceptual foundations of geometry to the discipline of Mathematics? Several questions to instigate us to research.

Another example would be to understand how Modern Mathematics was present in the Mathematics discipline of the school and how it was appropriated by the normal students. We know that the ideology of Modern Mathematics intensified more after the 1960s and 1970s in schools, so it would be necessary to shift the axis of our research to this period, and that sources, including oral ones, could be sought in order to map greater elements for an analysis.

As we close this text, we are sure that it is not exhausted here, but it opens the precedent of instigating the continuity of studies about this school and its many possible faces to be researched.

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